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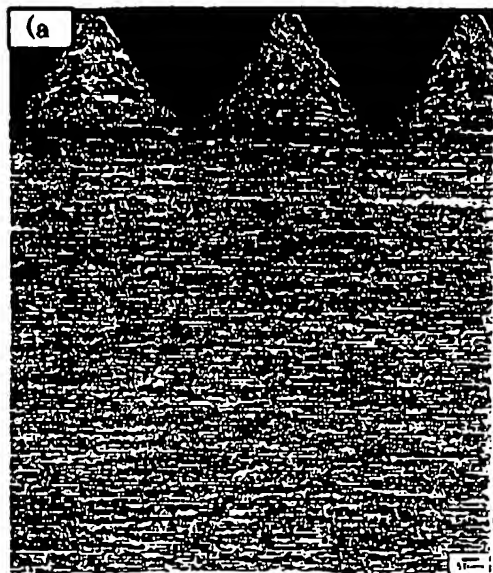
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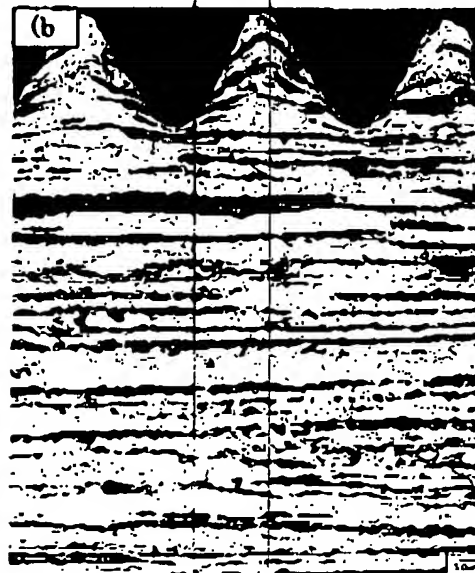
(続葉有)

(54) Title: FORMED PRODUCT AND METHOD FOR PRODUCTION THEREOF

(54): 発明の名称: 成形品とその製造方法



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(57) Abstract: A formed product, characterized in that it is produced by using, as a material, a steel having a superfine structure comprising ferrite grains having an average grain diameter of $3 \mu\text{m}$ or less and by a method comprising only a forming step and including none of refining steps; and a method for producing the above formed product with ease. The formed product contains no alloying element and has been subjected to no refining step, and has been imparted with high strength and high toughness by the above superfine structure.

(57) 要約: 平均粒径が $3 \mu\text{m}$ 以下のフェライト粒からなる超微細組織を有する鋼が素材とされ、成形のみで製造され、調質処理が一切施されていない高強度品であり、合金元素の添加あるいは調質処理によらず超微細組織によって高強度および高靱性が確保されて

ATTACHMENT G

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(84) 指定国 (広域): ヨーロッパ特許 (AT, BE, BG, CH, CY,
CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
NL, PT, RO, SE, SI, SK, TR).

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2文字コード及び他の略語については、定期発行される
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のガイダンスノート」を参照。

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/13309

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁷ C22C38/00, C22C38/06, B21J1/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ C22C38/00, C22C38/06, B21J1/04

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1922-1996	Toroku Jitsuyo Shinan Koho	1994-2003
Kokai Jitsuyo Shinan Koho	1971-2003	Jitsuyo Shinan Toroku Koho	1996-2003

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
WPI

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 10-53813 A (O & K Co., Ltd.), 24 February, 1998 (24.02.98), Full text (Family: none)	1-17
Y	JP 2001-234239 A (Independent Administrative Institution National Institute for Materials Science), 28 August, 2001 (28.08.01), Full text (Family: none)	1-17

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

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Date of the actual completion of the international search
25 December, 2003 (25.12.03)Date of mailing of the international search report
20 January, 2004 (20.01.04)Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

ATTACHMENT F

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